

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended) A digital signal processing system including a first digital signal processor processing apparatus connected via a predetermined transmission-line digital bus to a unit second digital signal processing apparatus whose data transmission rate can be at least externally controlled by other apparatuses on the digital bus, the first digital signal processor processing apparatus comprising:

generating means for generating a command for making an inquiry to the unit second digital signal processing apparatus connected via the predetermined transmission-line as to a digital bus about a capability of rate control functions of the unit second digital signal processing apparatus;

transmitting means for transmitting the command via the predetermined transmission-line digital bus; and

receiving means for receiving a response to the transmitted command, wherein

the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data;
and

the second digital signal processing apparatus transmits the data via the predetermined digital bus.

Claim 2 (Currently Amended) The digital signal ~~processor~~ processing system as set forth in Claim 1, wherein the rate control functions of the ~~unit~~ includes second digital signal processing apparatus include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 3 (Currently Amended) The digital signal ~~processor~~ processing system as set forth in Claim 1, wherein the first digital signal processing apparatus further comprising comprises recognizing means for recognizing, based on the received response, the rate control functions of the ~~unit~~ second digital signal processing apparatus.

Claim 4 (Currently Amended) The digital signal ~~processor~~ processing system as set forth in Claim 3, wherein the first digital signal processing apparatus further comprising comprises control means for controlling the transmission rate in accordance with the rate control of the ~~unit~~ second digital signal processing apparatus recognized based on the received response.

Claim 5 (Currently Amended) A digital signal processing system including a first digital signal ~~processor~~ processing apparatus connected via a predetermined ~~transmission line~~ digital bus to a ~~unit~~ second digital signal processing apparatus whose data transmission rate can be at least externally controlled by other apparatuses on the digital bus,

the first digital signal ~~processor~~ processing apparatus comprising:

receiving means for receiving a command for inquiry of a rate control transmitted from the ~~unit~~ second digital signal processing apparatus via the predetermined ~~transmission line~~ digital bus;

examining means for examining, based on the command, the rate control of the first digital signal ~~processor~~ processing apparatus; and

sending means for sending back a result of the examination, wherein

the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data; and

the second digital signal processing apparatus transmits the data via the predetermined digital bus.

Claim 6 (Currently Amended) The digital signal ~~processor~~ processing system as set forth in Claim 5, wherein the rate control ~~includes~~ functions include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 7 (Currently Amended) A digital signal processing system comprising:

a first digital signal ~~processor~~ processing apparatus connected via a predetermined ~~transmission line~~ digital bus to

a ~~unit~~ second digital signal processing apparatus whose data transmission rate can be at least externally controlled by other apparatuses on the digital bus, the first digital signal ~~processor~~ processing apparatus including:

generating means for generating a command for making an inquiry to the ~~unit~~ second digital signal processing apparatus connected via the predetermined ~~transmission line as to a~~ digital bus about a capability of rate control functions of the ~~unit~~ second digital signal processing apparatus;

transmitting means for transmitting the command via the predetermined ~~transmission line~~ digital bus; and

first receiving means for receiving a response to the transmitted command; and

~~a second digital signal processor connected via the predetermined transmission line to the unit~~, the second digital signal processor including:

second receiving means for receiving a command for making an inquiry of a about a capability of rate control functions transmitted from ~~unit~~ the second digital signal processing apparatus via the predetermined ~~transmission line~~ digital bus;

examining means for examining, based on the command, the rate control functions of the second digital signal processor; and

sending means for sending back a result of the examination, wherein

the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data;

and

the second digital signal processing apparatus transmits the data via the predetermined digital bus.

Claim 8 (Currently Amended) The digital signal processing system as set forth in Claim 7, wherein the rate control ~~includes~~ functions include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 9 (Currently Amended) The digital signal processing system as set forth in Claim 7, further comprising recognizing means for recognizing, ~~based on the received response,~~ the rate control functions of the ~~unit~~ second digital signal processing apparatus based on the received response.

Claim 10 (Currently Amended) The digital signal processing system as set forth in Claim 9, further comprising control means for controlling the data transmission rate in accordance with the rate control functions of the ~~unit~~ second digital signal processing apparatus recognized based on the received response.

Claim 11 (Currently Amended) A digital signal processing method for a ~~unit~~ second digital signal processing apparatus connected via a predetermined ~~transmission line~~ digital bus to a first digital signal ~~processor~~ processing apparatus, where a

data transmission rate of the ~~unit~~ second digital signal processing apparatus can be ~~at least externally~~ controlled by other apparatuses on the digital bus, the method comprising steps of:

generating a command for making an inquiry to the ~~unit~~ second digital signal processing apparatus connected via the predetermined ~~transmission line as to the~~ digital bus about a capability of rate control functions of the ~~unit~~ second digital signal processing apparatus;

transmitting the command via the predetermined ~~transmission line~~ digital bus; and

receiving a response to the transmitted command, wherein the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data; and

the second digital signal processing apparatus transmits the data via the predetermined digital bus.

Claim 12 (Currently Amended) The digital signal processing method as set forth in Claim 11, wherein the rate control ~~includes~~ functions include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 13 (Currently Amended) The method as set forth in Claim 11, further comprising a step of recognizing, ~~based on the received response,~~ the rate control functions of the ~~unit~~

second digital signal processing apparatus based on the received response.

Claim 14 (Currently Amended) The digital signal processing method as set forth in Claim 13, further comprising a step of controlling the data transmission rate in accordance with the rate control functions of the ~~unit~~ second digital signal processing apparatus recognized based on the received response.

Claim 15 (Currently Amended) A digital signal processing method for a ~~unit~~ second digital signal processing apparatus connected via a predetermined ~~transmission line~~ digital bus to a first digital signal ~~processor~~ processing apparatus, where a data transmission rate of the ~~unit~~ second digital signal processing apparatus can be ~~at least externally controlled by other apparatuses on the digital bus~~, the method comprising steps of:

receiving a command for inquiry about a capability of a rate control functions transmitted from the ~~unit~~ second digital signal processing apparatus via the predetermined ~~transmission line~~ digital bus;

~~examining, based on the command,~~ the rate control functions of the first digital signal processing apparatus based on the command; and

sending back a result of the examination, wherein the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and

asynchronous data transmission for transmitting control data;
and

the second digital signal processing apparatus transmits
the data via the predetermined digital bus.

Claim 16 (Currently Amended) The digital signal processing method as set forth in Claim 15, wherein the rate control ~~includes~~ functions include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 17 (Currently Amended) A digital signal processing method for a ~~unit~~ second digital signal processing apparatus connected via a predetermined ~~transmission line~~ digital bus to a first digital signal ~~processor~~ processing apparatus, where a data transmission rate of the unit can be ~~at least externally~~ controlled by other apparatuses on the digital bus, comprising:

a first digital signal processing procedure including steps of:

generating a command for making an inquiry to the ~~unit~~ second digital signal processing apparatus connected via the predetermined ~~transmission line as to the~~ digital bus about a capability of rate control functions of the ~~unit~~ second digital signal processing apparatus;

transmitting the command via the predetermined ~~transmission line~~ digital bus; and

receiving a response to the transmitted command; and

a second digital signal processing procedure including steps of:

receiving a command for inquiry about a capability of a rate control functions transmitted from ~~unit~~ the second digital signal processing apparatus via the predetermined ~~transmission line~~ digital bus;

~~examining, based on the command,~~ the rate control functions of a the second digital signal processor processing apparatus based on the command; and

sending back a result of the examination, wherein the predetermined digital bus supports real-time data transmission for transmitting audio/visual data and asynchronous data transmission for transmitting control data; and

the second digital signal processing apparatus transmits the data via the predetermined digital bus.

Claim 18 (Currently Amended) The digital signal processing method as set forth in Claim 17, wherein the rate control ~~includes~~ functions include a synchronous control, a base data transmission rate control, and a variable rate control for fine adjustment of a base data transmission rate.

Claim 19 (Currently Amended) The digital signal processing method as set forth in Claim 17, further comprising a step of recognizing, ~~based on the received response,~~ the rate control functions of the ~~unit~~ second digital signal processing apparatus.

Claim 20 (Currently Amended) The digital signal processing method as set forth in Claim 19, further comprising a step of controlling the data transmission rate in accordance with the rate control functions of the ~~unit~~ second digital signal processing apparatus recognized based on the received response.